



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY
Question Paper

B.Sc. Honours Examinations 2022

(Under CBCS Pattern)

Semester - VI

Subject : ZOOLOGY

Paper : C 13-T

Developmental Biology

Full Marks : 40

Time : 2 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

1. Answer any *four* questions : 5×4=20
- What is regeneration? Describe the regeneration process of Hydra.
 - How polyspermy is prevented in mammals?
 - Describe Spemann & Mangold's experiment with dorsal lip transplantation in newts.
 - Draw and describe the structure of mammalian sperm.
 - Define cleavage. Describe the different patterns of cleavage.
 - What is teratogenesis & embryonic stem cell?

2. Answer any *two* questions :

10×2=20

- (a) What is spermateleosis? Describe different types of modifications that occur during spermateleosis. Mention the significance of oogenesis. 1+6+3
- (b) Describe the cortical reaction and acrosome formation process that occur during fertilization. 5+5
- (c) Define fate map. Draw and describe the gastrulation of frog embryo. 2+8
- (d) What is placenta? Mention its type. Describe the formation and function of amnion in chick embryo. 2+2+6
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